

Pediatrics & Parents

The newsletter for people who care for children

Richard J. Sagall, MD, Editor

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Breakfast and Diabetes

High school students who skip breakfast are twice as likely to become obese adults as teens who eat breakfast regularly. This increase is the same as in teens who have a family history of diabetes. (Diabetes increases the risk of obesity by a factor of two).

"It's not surprising [that skipping breakfast is a risk factor], but here we're comparing it to a history of type 2 [juvenile] diabetes," said Alison Okada Wollitzer, PhD, the study's lead researcher. Wollitzer said that skipping breakfast "is an important risk factor, it turns out, associated with a similar rate of obesity. And eating breakfast is a lifestyle factor we can try to do something about."

Findings from the 2,700 Santa Barbara, CA high school students in the study were startling. Of those students who skipped breakfast but had no family history, 16% were obese, and of those who ate breakfast but had family history 18% were obese. And, most significantly, almost one-third (32%) of the students were obese who both skipped breakfast and had a family history of diabetes.

Not surprisingly, the students who ate breakfast were less likely to eat junk food at lunch, more likely to eat fruits and vegetables, and more likely to exercise regularly.

Pediatric News, 8/06

Breastfeeding is Best

It's official – breastfeeding is best. According to a committee report from the American College of Obstetricians and Gynecologists (ACOG), breastfeeding is the "preferred method of feeding for newborns and infants, and nearly every woman can breastfeed her child."

The report, *Breastfeeding: Maternal and Infant Aspects*, goes on to recommend, "...exclusive breastfeeding of infants until approximately six months of age, with longer periods being beneficial." There are a few exceptions to breastfeeding, which include "...women who take illegal drugs, have high alcohol intake, have HIV, have an infant with galactosemia [an uncommon disorder involving high galactose blood levels], or have certain other infections."

The report concludes by stating "Education and support for breastfeeding can improve breastfeeding rates for all women and would be a positive economic investment for both health plans and employers because there are lower rates of illness among infants who are breastfed."

Obstetrics & Gynecology, 2/07

Causes and Treatment of the Asthmatic Child

By Craig LaForce, MD

I have researched and written about asthma and related chronic obstructive pulmonary disorders (COPD) for many years and treated thousands of patients with respiratory ailments, many of them children. It may surprise some to know that nearly one out of ten American children now have the disease. In fact, asthma is one of the most common chronic diseases of childhood. An estimated 6.5 million children under age 18 and 80 million people overall have been diagnosed with asthma, an incidence that has doubled since 1980, according to a recent Centers for Disease Control and Prevention (CDC) report.

Asthma is an inflammatory condition of the bronchial airways that adversely affects the normal function of the respiratory system, causing it to become excessive and over-reactive, stimulating an increase in mucus production, mucosal swelling and muscle contraction. These responses result in airway obstruction, chest tightness, coughing and wheezing. In extreme cases, these symptoms can cause severe shortness of breath and low blood oxygen. Virtually all children with asthma, whether their condition is mild or acute, often experience a reversal of symptoms until something triggers the next episode. Though asthma cannot be cured, it can usually be controlled. For this reason, the American Lung Association has made the control of childhood asthma one of its top priorities. Most parents of asthmatic children want to know how to manage this disease so their children can breathe comfortably and lead healthy, active lives that are as free as possible from the asthmatic symptoms.

What Causes Asthma?

The inflammation brought on by asthma is triggered by allergies, viral respiratory infections and airborne irritants, among other causes. Approximately 75% to 80% of children with asthma have significant allergies. Genetic predisposition also plays a significant role.

Allergic reactions produce both immediate and late phase (delayed) reactions. Approximately half of the immediate allergic reactions to inhaled allergens are followed by a late phase reaction. This late phase reaction causes more airway inflammation, which in turn leads to irritability or hyper-responsiveness of the airways. Serious injury and scarring may occur after a period of prolonged airway inflammation.

What Are The Signs And Symptoms?

Wheezing, though characteristic of asthma, is not the most common symptom. Coughing is often "hidden" with asthma, where wheezing is not discernible to the patient or the treating physician. Any child who has frequent coughing, recurrent night coughing, or coughs after running or crying should be evaluated for asthma. Infants who have asthma often have a rattling cough and rapid breathing, and may have an excessive number of respiratory infections (pneumonias or bronchitis.) Obvious wheezing episodes might not be noted until age 18 to 24 months, through age four. Chest tightness and shortness of breath are other symptoms of asthma that may occur either alone or in combination with any of the above symptoms. Since these symptoms can occur for reasons other than asthma, the possibility of other respiratory diseases must always be considered.

Proper Use of Aerosols

The use of aerosols is considered a mainstay in the treatment of respiratory diseases. Aerosol treatments can be delivered via a nebulizer, a dry powder inhaler, or a pressurized metered dose inhaler (MDI for short). Although MDIs have been used for over 50 years they continue to cause patient problems – especially for young children, who often do not have the necessary coordination to use the device and receive the required dose. In my experience, patients who fail to use MDIs correctly and effectively face two big challenges. The first involves coordination and the second involves dosage.

Difficulties in Proper Inhalation of Asthma Medication

Coordination difficulty occurs when patients fail to coordinate the press-and-breathe action required to deliver the drug into their lungs. For a patient to receive the full benefit from the medication, the MDI must be triggered while the patient is breathing in. Once the medication is released, the patient must continue to inhale so the drug can be properly absorbed. If the patient triggers the inhaler before or after breathing in, the drug will never make it into the lungs, and will likely be deposited into the mouth or lost during exhalation. Astonishingly, over 50% of patients, regardless of age or how long they have been using inhalers, cannot coordinate this press-and-breathe action correctly. The result: patients miss the full benefit of the therapy.

The Importance of Tracking How Many Doses Remain

Accurately tracking the amount of medication left in a patient's inhaler is another obstacle to effective aerosol delivery and treatment. Most MDIs do not come with a built-in dose counter. Studies have shown that as many as 74% of patients do not know how many doses are left in their inhalers. Certainly most children fall into this category. To make matters worse, as many as 25% of patients found their inhalers were empty just when they needed them. Parents are especially fearful of this scenario because in extreme cases, the lack of proper dosage can be life threatening.

The Good News

A new companion device, only available since last summer, offers a solution to these challenges. MD Turbo®, a compact, handheld device, can be used for the majority of the MDIs dispensed in the U.S., whether a "rescue" inhaler or a "controller." The device, which has a one-year lifespan, is designed to trigger delivery of medication while the patient is inhaling, and automatically counts down every time a puff is used. This product can provide major benefits to patients, but only if used correctly. For more information and directions on its use, visit www.MDTurbo.com and click on "Patient Instructions."

Positive Feedback

This device, the first and only one of its kind, carries the potential to lift us out of the Dark Ages in controlling asthma. Placing your MDI into MD Turbo® easily resolves the challenges of both proper coordination and dose counting, ensuring the patient receives the most effective treatment available.

Parent feedback has been overwhelmingly positive, from my own experience and from what I've learned from other physicians and registered nurses. With the MD Turbo®, parents feel confident their child has received the entire, correct dose of their medication. My pre-teens and teenagers, who dislike having to use "those big ugly spacers" think MD Turbo's compact, unobtrusive design is "cool." My youngest patients who have used MD Turbo® are in the five to six-year-old range. When mothers of such young children ask me if their children can activate the device on their own, I tell them that if a child can sip through the straw in a juice box, he or she can activate this by themselves and receive the right amount of medication. Although requiring some instruction, it really is that easy.

After years of dealing with asthmatic patients of all ages and degrees of affliction, I have watched many of them struggle to get the right dose into their lungs, and seen

the results when they didn't have the required doses available when it was urgently needed. Until we find a cure for asthma, I would say this advance is great news – especially for parents.

Dr. Craig F. LaForce is Clinical Professor of Pediatrics at the University of North Carolina at Chapel Hill and in private practice specializing in asthma and allergy at Carolina Allergy & Asthma Consultants, P.A. in Raleigh, Chapel Hill and Cary, North Carolina. He is also the Medical Director of North Carolina Clinical Research. Dr. LaForce received his medical degree from Jefferson Medical College in Philadelphia, Pennsylvania. He completed a residency in pediatrics at the University of North Carolina at Chapel Hill and a postdoctoral fellowship in pediatric/adult allergy and immunology at the National Jewish Hospital Asthma Center in Denver, Colorado.

Paternal Age and Autism

Many of us are aware of the increased genetic risks to children born of older mothers (e.g. increased risk of Down Syndrome), but there have been fewer studies on the effects of advanced paternal age on offspring. In a study published in the September 2006 issue of the *Archives of General Psychiatry*, Abraham Reichenberg, PhD and his colleagues from research institutes and universities in New York, London, Jerusalem and Tel Aviv found that the older a father at the time of conception, the greater the risk his child will have autism.

Of the more than 132,000 men and women included in the study whose paternal and maternal ages were known, 110 were diagnosed with autism spectrum disorder (ASD). The study used data from more than 318,000 Jewish men and women born in Israel during six consecutive years and who underwent draft board assessment at age 17.

There was a straight-line relationship between a recruit's paternal age and his risk of ASD. After controlling for year of birth, socioeconomic status and maternal age, the offspring of 40-year-old men were 5.75 times as likely to have ASD compared to children of men younger than 30 years old at conception. Interestingly, the maternal age had no effect on the incidence of ASD.

Although the reason for this relationship is unknown, the researchers suggested it might be due to new gene mutations associated with advancing paternal age or genetic imprinting changes.

Archives of General Psychiatry, 9/06

Is Your Child Getting Enough Fiber?

By Sara Jo Poff

Three out of four children aren't getting enough fiber, which puts them at high risk for chronic constipation, among other things. Here are some ways to make sure your child isn't at risk and how to incorporate more fiber in your family's diet.

Why Fiber is Important

Fiber is the part of natural foods (plant foods, the only place fiber is found) that isn't digested. It provides "roughage" for everything that you eat and helps things move through the digestive process. In Dr. Rex Russell's book, *What The Bible Says About Healthy Living*, he notes the importance of fiber based on a group of African men, some living in Africa and some attending school in England. The African natives ate a traditional high-fiber diet and rarely needed medical attention. The Africans who were at school in England were enjoying processed foods without fiber. They suffered from episodes of appendicitis, hemorrhoids, ulcers, and gallstones.

The term "processed foods" refers to products made with grains that are heavily processed and very far from their natural state. These include products like enriched macaroni, cookies, cakes, pies, and cereals.

Inadequate fiber intake is also believed to contribute to, and sometimes even cause, heart disease, colon cancer, high blood pressure, and adult onset diabetes. Without sufficient fiber to move food through the body, toxins and bodily waste can fester inside the body for extended periods of time.

A lack of fiber also highly contributes to obesity problems in America. Part of this results from the negligible amount of fresh fruits and vegetables consumed by Americans. Both fruits and vegetables, along with other natural foods, contain two types of fiber: soluble and insoluble. Soluble is the kind of fiber that changes as it moves through your digestive system, while insoluble doesn't change; both are equally important.

Soluble fiber is most often found in dried beans, oats, barley, fruits and vegetables. It stabilizes blood sugar, reduces blood pressure and cholesterol, and speeds up your body's transit time (the time it takes to move food through your digestive system and complete the digestion process). Most Americans' transit time is around 50 to 60 hours. That's a long time, considering the normal transit time should be around 12 to 18 hours.

(If you're interested in finding out your child's transit time, watch her bowels after she's eaten corn. Since corn does not digest, you will see it in her bowels and be able to estimate her transit time starting from when she ate the corn to when it was in her bowel.

Insoluble fiber helps prevent constipation and is found in whole grain products, wheat bran, seeds, and the skins of fruits and vegetables. This fiber even helps rid our bodies of extra, unnecessary calories and fat that we consume.

How Much Fiber Do Children Need?

Currently, children ages four to 19 years get around 12 grams of dietary fiber per day, according to Dr. Christine Williams, previously with the American Health Foundation. Dr. Williams recommends that children get at least their "age plus five" grams of fiber per day. For eight year olds, this means at least 13 grams of dietary fiber per day.

A minimum of five fruits and vegetables per day, as recommended by the USDA Food Pyramid, will give your child a large percentage of his necessary fiber. The remaining amount should come from sources such as whole grain products, beans, nuts, and seeds.

Ways to Incorporate More Fiber in Your Family's Diet

Before you begin incorporating more fiber in your family's diet, it is important to remember to gradually increase your family's fiber intake. Adding too much fiber too quickly, especially when your diets aren't used to much of it, can cause bloating, gas, and cramps.

With that being said, here are some ways to make it easy for your family to enjoy more fiber. The first and easiest way is to change the type of flour that is used in the breads, cereals, and pastas you purchase. Switching to whole grain bread is a big and very important step, especially considering how many sandwiches children eat. Make sure the bread is made with 100% whole grain flour, and not enriched, bleached flour. Check the ingredients to find out what flour is used. For 100% whole grain breads, it is often marked right on the front of the package.

When making dishes like lasagna and spaghetti, use whole wheat pasta. Admittedly, whole wheat pasta is hard for children to get used to when it is served plain,

but if it's covered in spaghetti sauce, they are unable to tell the difference. Whole wheat pastas have substantially more fiber. In fact, a two-ounce serving of whole wheat pasta contains six grams of fiber, while "traditional" enriched lasagna contains a mere two grams of fiber. If you are unable to find whole wheat pasta, try looking in your supermarket's natural food aisle.

For your child's cereal, make sure it is labeled with terms like "whole grain" or "100% whole grains," without a multitude of additional, unnecessary ingredients, such as large amounts of sugar.

Many other foods that are made with white flour are often just as delicious, if not more, when they are made with whole wheat flour. This includes waffles and pancakes, dinner rolls, tortillas, and English muffins. Also, find more ways to incorporate things like pinto or kidney beans, lentils, and chickpeas into your meals. Try adding them into soups, stews, and salads. Since meat doesn't contain any fiber, it would help to replace meat with beans, lentils, or chickpeas in your family's meals a couple of times a week. Just as with meat, these replacements will also provide protein.

Brown rice is a much healthier alternative to white rice and is often easily accepted by children who like rice. If your children do not care much for rice, try serving it sprinkled with cheese, mixed with salsa, or both. Make it into an entire meal by mixing in some pinto or kidney beans and corn.

And once again, don't forget the importance of fiber from fruits and vegetables. A medium-sized apple, banana, pear, and many other fruits contain approximately three grams of fiber each. Keep in mind, however, that you will get the most nutritional benefit from unpeeled, raw produce. Cooking and peeling can significantly reduce the nutritional value, including the amount of fiber. Having at least five servings of fruits and vegetables daily means giving your child at least one serving at every meal and with each of two snacks, or getting two with every meal if your child doesn't get any at snack times. While they are often passed aside for processed snacks, fruits and vegetables are the best things you can send with your child to school for snacktime.

If there are three meals and two snacks each day to get enough fiber, it's important to make the most of each of these opportunities. Remember, the amount of fiber, fruit, and vegetables recommended daily are the minimum amounts needed. Make sure to cut down on processed foods and the vast array of products made with white flour. Finally, and very importantly,

increase your child's water consumption. Water is very important to the digestive process and will help the fiber along.

While these suggestions may seem like a lot of changes, make sure to incorporate them gradually. It helps to constantly remember the benefits that your family is getting. The decreased risk of heart disease, diabetes, colon cancer, obesity, and other health problems are definitely worth the extra work. For information or recipes, try searching through websites or cookbooks with the words "natural foods" and "high-fiber." Vegetarian cookbooks will have many good ways to incorporate beans into your family's meals. Lastly, remember to read the ingredients labels on your family's food.

Through the guidance of various pediatricians and dietitians, Sara Jo Poff has completed extensive research on healthy lifestyles. Her freelance writing focuses on organics and natural foods, as well as children's health and safety. Sara Jo lives in Zimmerman, MN.

Iron Supplements and Intelligence

Iron supplements are recommended for all pregnant women to help prevent anemia. It's also believed that prenatal iron supplements help increase children's IQ. To test this hypothesis, doctors in Australia enrolled 430 pregnant women in a long-term study. Half the women took the usual iron supplementation starting at 20 weeks gestation while the other half received a placebo. Seventy percent of the mothers participated in the follow-up four years after the study began.

Not surprisingly, the iron supplement helped prevent maternal anemia. At the end of their pregnancies, 11% of the women in the placebo group were diagnosed with iron-deficiency anemia while only 1% of those who had received supplemental iron had that diagnosis.

IQ tests given to the children at age four found no difference in results between the children whose mothers had received the iron supplement and those who hadn't. However, 16% of the children in the iron supplement group had abnormal scores on behavioral tests compared to only 8% in the control group. The reason for this later finding isn't known.

Prenatal iron supplements help prevent iron-deficiency anemia in mothers, but had no affect on the child's intelligence.

American Journal of Clinical Nutrition, 5/06



Children in Hospitals

By John E. Monaco, MD

Toxic Shock

Diseases sometimes have exotic-sounding names, and they take on an almost romantic air when we hear about them in the media. Certainly “Bird Flu” and “Salmonella” have been mentioned in the news recently, so much so that they become an integral part of the average person’s lexicon. Oddly, we hear these names as long as the news media finds them interesting, until they are replaced by a more compelling story. We are left with the impression that such diseases are no longer a concern, or perhaps that they have been eradicated. Remember how we all made plans to deal with avian flu (“bird” flu) and now we don’t hear about it any more? Guess what, the disease is still out there and is just as potentially dangerous.

The same phenomenon is true for a disorder known as Toxic Shock Syndrome (TSS). In the late 1970s this disease was often in the news. Although it affected people of all ages and both sexes, we heard about it primarily related to tampon use, and therefore young females were the focus. When tampons were redesigned and made less absorbent, the incidence of the disease dropped precipitously, and consequently one virtually never hears about it in the media. Now the average consumer is left to think that the disease no longer exists. This misconception, however, is untrue. The disorder does exist, the spectrum of presentation is much better understood, and, as the patient I cared for the other day will tell you, the treatment is effective if instituted soon enough.

Toxic Shock remains a peculiar syndrome, characterized by fever, rapid onset of shock, kidney dysfunction or failure and involvement of many other organ systems, including the lungs. It is caused by very specific toxins produced by *Staphylococcus aureus* and *Streptococcus pyogenes*, and the presentation is a function of the body’s response to those toxins. One often sees a diffuse red rash and profound GI involvement as well. The classic cases were associated with tampon use, as mentioned, and the offending bacteria could often be cultured from vaginal secretions. Since tampons have been redesigned, we now more commonly see TSS as-

sociated with other primary infections caused by these particular bacteria, such as pneumonia, sinusitis, osteomyelitis or cellulitis. In essence, whenever there is a scenario involving a primary infection with Staph. or Strep., Toxic Shock Syndrome is a possibility.

The young lady I took care of recently was in her mid-teens. She was not on her menstrual period at the time of admission but had been suffering from a very difficult case of sinusitis for several weeks that required multiple antibiotic changes. When the emergency room doc called me, he was surprised by the fact that in addition to her fever and signs of a sinus infection, she was lightheaded and had dangerously low blood pressure. She also had a very unusual rash and her kidney function was inexplicably abnormal. When I heard the symptoms, bells and whistles went off in my head. I had flashbacks to horribly sick young ladies I took care of during my training in the 80s, patients who became severely ill before the syndrome had been accurately recognized and treated. A few of those young patients did not survive. I wasn’t going to let that happen in this case.

The patient was brought up to our pediatrics intensive care unit (PICU), we started her on aggressive fluids, considered giving her medicine to normalize her blood pressure, and initiated powerful antibiotics to treat what was most likely a resistant bacterium capable of secreting the TSS toxin. Within 24 hours she felt much better, her blood pressure normalized, her kidney function was restored and her fever broke. When I told her family that I thought she had exhibited early characteristics of Toxic Shock Syndrome, they responded that they thought it had disappeared in the 80s. No, it hadn’t disappeared, I counseled them. You just don’t hear about it much on the news anymore!

John E. Monaco, M.D., is board certified in both Pediatrics and Pediatric Critical Care. His new book, Moondance to Eternity, is now available. He lives and works in Tampa, Florida. He welcomes your comments, suggestions, and thoughts on his observations.

Answers to Your Questions

Our experts will answer your questions. Please keep them general in nature as we can give specific advice nor suggest treatment for your child. All such questions should be asked of your child's doctor. Send your questions to QandA@pedsforparents.com or to Pediatrics for Parents, 120 Western Avenue, Gloucester, MA 01930.

Not Talking

Q My 15-month-old daughter only says "mama" and "dad." Is there anything to worry about?

A No, you don't have to worry. It is true that some 15-month-old babies have larger vocabularies than your daughter, but there are ranges of normal language development and your baby is well within this normal range.

Here are some guidelines that you can use:

- At one year of age, a single word or two is normal
- * At 18 months of age, your toddler should understand a great deal
- At two years of age, she should be putting two words together

If she falls below these guidelines it may indicate, and I want to emphasize may, a problem such as language delay, hearing problems, mental retardation, or autism. Before you jump to any conclusions, discuss this with your child's doctor.

It is important to remember that each child develops at her own pace. As long as her developmental milestones, including speech, are within the normal range, nothing needs to be done. Understanding is more important than active speech. Studies have shown that first-born children usually speak earlier than subsequent siblings, probably because parents have more time to talk with their first baby than to the second.

My best advice to you is to spend time each day reading to your daughter. The evidence is clear that reading books to children is the best way to help them achieve their maximum intellectual potential. Less TV watching and more book reading is the way to go.

Alvin N. Eden, MD

Sleep Troubles

Q My eight-year-old son has a tough time falling asleep. Any tips for helping him?

A Many children have trouble falling asleep. Sometimes there's a specific, easily identifiable problem – they're too hyped up from after dinner activities, or too excited by having a friend sleep

over. An occasional difficult night is nothing to be alarmed about, but a few simple measures can help many children whose sleep habits need work.

Good sleep routines start in the morning. To help your child fall asleep easily at bedtime, you may need to wake him at the same time every morning, seven days a week. Sleeping in on weekends leads to difficulty falling asleep Sunday night, and disrupts the entire week's sleep habits.

Make sure your child isn't consuming caffeinated products such as colas, citrus sodas, iced tea, or chocolate. Because caffeine is metabolized slowly in children, even a small daily dose can lead to bedtime problems. If your child takes daily medicine, ask your doctor if it might be interfering with sleep.

Avoid television or other video-based entertainment in the evenings. Even calm-appearing video is very stimulating to the areas of the brain involved with sleep-wake cycles.

Have a fixed, rigid bedtime routine that will serve to cue your child every night that bedtime is approaching. Your routine might include tooth brushing, reading, singing, stories, reading, prayer, or any other calm activity. The exact routine doesn't matter, but it should be consistent every day.

Some children don't seem to need especially rigid sleep routines, but if you're struggling night after night to get your child to bed, you'll want to make sure that you've got a definite plan to establish good sleep habits.

Roy Benaroch, MD

Terrible Eater

Q My 18 month old is a terrible eater. He refuses to eat any solid foods. What should I do?

A The first thing you should do is stop worrying about it. Many toddlers are picky eaters. As a matter of fact, it is normal for the appetite to decrease at around this age. Your baby will not starve if he doesn't eat very much each day.

Continued on page 11



Perspectives on Parenting

By Michael K. Meyerhoff, EdD

Fixing Fears in Early Childhood

Monsters under the bed. Ghosts in the closet. During the preschool or early childhood period, roughly from two-and-a-half to five or six years of age, children tend to be terrified by a lot of things. Where do these fears come from? And more importantly, what can parents do to alleviate them?

Parents should first consider the preschooler's stage of cognitive development. Why is it that these fears are common among children in this particular age range, but are non-existent or at least rare at earlier or later ages? The answer rests in the recognition that a preschooler has mental capabilities that an infant or toddler does not have, and he doesn't have other mental abilities that an elementary school child or adolescent does have.

An infant or toddler is in the "sensorimotor" stage of cognitive development. He deals with the world in a very physical way, through his senses and motor movements, and does not have much mental cognition at all. He is not a "thinker" and does not have the capacity for imagination and creativity – elements that are necessary to conjure up images of monsters under the bed and ghosts in the closet. Consequently, any fear he may show is likely to be a legitimate response to real elements of the environment that exist in the here and now.

A preschooler is the "pre-operational" or "pre-logical" stage of cognitive development. He now has genuine mental abilities, including imagination and creativity. However, while he is indeed a thinker, he is not a particularly proficient thinker. His mind has many significant limitations, most notably a lack of rational thinking. The capacity to apply solid logic will not develop until the elementary school years (the "concrete operational" stage), and the capacity to apply abstract logic will not appear until adolescence (the "formal operational" stage). In addition, since the preschooler has been in the world for a relatively brief period of time, he does not have access to the wealth of practical experience that is available to an older child.

So if you put together imagination and creativity, the inability to think logically, and an absence of experience,

you have a recipe for all sorts of unfounded fears. In fact, these fears are best described as "phobias" because a phobia is defined as a fear that has no rational basis. This is why some parents have to put off potty training their three year old for a few months because a nasty older sibling told him stories about sharks and alligators lurking in the water of the toilet bowl, and the three year old is now truly terrified that he will be bitten on the butt if he sits on the seat.

What can mothers and fathers do to alleviate these fears? Well, if imagination and creativity, the inability to think logically, and an absence of experience caused the fears, you can employ those same elements to combat the fears. Let's say we're dealing with a monster hiding under the bed. The preschooler is afraid to go to sleep unless you never turn off the light and you stay with him all night. As many parents will tell you, trying to "talk sense" to the child will be a colossal waste of time.

On the other hand, you can follow the successful strategy my wife devised when our children had such fears. She got an empty spray bottle, filled it with water, and peeled off the label. Next, depending on the specific fear of the moment, she replaced the old label with a new one that read "Anti-Monster Spray," "Anti-Ghost Spray," or whatever. Then she sprayed a mist around the bed, closet, window or wherever the evil thing allegedly was lurking while explaining that if the creature attempted to cross the powerful chemical barrier she was in the process of establishing, it would instantly disintegrate.

This pretend play usually worked quite well. For especially stubborn fears, or for fears lurking outside the home, additional items were sometimes required. These included foreign coins picked up on vacation that were designated as special protective charms or t-shirts on which she drew magical shields with an indelible marker.

If you're uncomfortable indulging your child's imagination, don't be. It always amazes me that people who are reluctant to be untruthful in such matters don't realize that they have no qualms telling their child about Santa Claus. When you are dealing with the pre-logical mind

of a preschooler, you have to work with what you've got. If you believe you can "explain" things to him as if you were talking to one of your peers, again, you are pursuing an exercise in futility. And keep in mind that by the time your child has developed the mental ability to be mad at you for being untruthful, he also will have developed the mental ability to be embarrassed about his previous beliefs – and his disinclination to bring up that embarrassment will outweigh any inclination he may have to express displeasure with your parenting practices.

Now I do want to point out that not all fears during this period can be classified as phobias. Some are actually rooted in rationality and need to be treated as legitimate. Let's say a child is bitten by a large dog or is simply frightened by the dog's ferocious barking. Subsequently, he may be afraid to approach even a small dog. Rather than ridiculing his reluctance or forcing him to confront the petite canine, it would be wise to indulge him for a while. Give the fear a chance to subside on its own, and then gradually reintroduce him to dogs at a pace and distance that permits him to be systematically de-sensitized to the fear.

Also, keep in mind that there are many things a young child should be allowed to be afraid of. A good example of this would be a three year old's panic over being left at a childcare center or preschool. Many parents, often with the encouragement of the teachers, pursue a strategy that involves forcing the child endure the situation. Sometimes this works eventually, but only after the child has suffered a considerable amount of anguish. And quite often it results in the child engaging in horrific behavior that includes tantrums and the hitting or biting of any other kids that come near him.

In our modern society, we have taken for granted that most young children will be placed in a childcare center or preschool so their parents can go to work. But you have to remember that this is an extremely recent phenomenon. Prior to 40 or 50 years ago, we never expected, much less required, young children to gracefully accept being placed in formal, large group settings outside the home. Mothers and fathers must realize that if a child is uncomfortable with this arrangement, the problem is not the child's behavior, but rather the potentially unrealistic and unfair expectations being placed on his behavior.

My wife was the owner and director of a large child care center and preschool for many years. Every once in a while she would have a kid enrolled who just could not "get with the program." Her solution was to keep a list of people in the community who offered home day care – a setting that involves many fewer children in a more home-like atmosphere. She would recommend to the

parents that they place their child in such a setting for six months or a year, and then re-enroll him in her facility after he had a chance to develop a little more and become acclimated to an out-of-home experience. I cannot recall an instance where this solution did not work out quite well for all involved.

By the way, please don't tell my wife that I am imparting all of her wisdom under my byline. Her reaction would be something that anyone at any age should fear.

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Escalator Dangers

There are approximately 33,000 escalators in the U.S. According to a recent study that analyzed thirteen years of data (1991-2002) culled from the National Electronic Injury Surveillance System database, escalators injure approximately 2,000 children age 0-19 per year. Injuries to children under age five accounted for 12,000 of the 26,000 incidents that occurred during that period. Falls were the most common injury (51%), followed by entrapments (29%). The most common injured body part was the leg (28%), followed by the head (24%) and the arm (23%).

Children under five years old are more likely to be injured than children in other age groups, with entrapment injuries of the hand the most common type of injury (41%). Most of these injuries occur when the child, often in a stroller, gets his hand trapped in the space between the steps and the sidewall.

The study concluded that escalators designed with a reduced gap between the steps and sidewall would help reduce risk of entrapment. The researchers also recommended that children not be allowed to ride in strollers while on the escalator, and that parents and children be alert while riding escalators.

Pediatrics, 08/06

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You Swallowed What?

By Richard J. Sagall, MD

Young children put just about anything and everything into their mouths. If it's small, there's a good chance the child will end up swallowing it. Medically called "foreign body ingestion," this activity is most common among children six months to three years old.

According to the Centers for Disease Control and Prevention (CDC), in 2003, children under 20 years old swallowed over 110,000 objects. Coins were the most commonly swallowed item. Although most items harmlessly pass on their own, about one percent of "swallowers" die. Boys and girls are equally likely to swallow a foreign body, but male teenagers are much more likely to swallow foreign bodies than girls of the same age.

In young children, 40% of the time no one sees the child put the item into his mouth or swallow it. In half of all cases, the child has no symptoms and the item comes out the other end without problems. However, there are two situations when a foreign body may need to be removed by a doctor.

The first dangerous situation is when the foreign body becomes stuck in the esophagus – the tube that connects the mouth and the stomach. Many objects stuck in the esophagus cause no symptoms, but common symptoms include difficulty swallowing, drooling, food refusal, gagging, vomiting, wheezing, irritability, and behavioral changes. Older children will complain of feeling as if something is stuck in their throat.

If the foreign body has been in the esophagus for a while, the child may fail to thrive and grow. Sometimes these children suffer from recurrent episodes of aspiration pneumonia (pneumonia caused by liquids or food getting into the lungs). If a sharp object makes it past the esophagus and into the stomach, then it will likely finish its trip through the intestine and colon and come out in the stool.

An esophageal perforation occurs when an object punctures the esophagus. This serious condition may cause neck swelling, crepitations (creaking noises made by gas that has seeped into tissue), and air inside the chest cavity (pneumomediastinum) and needs immediate medical attention.

Only two-thirds of swallowed foreign bodies are radiopaque, meaning they show up on x-rays. Metal detectors are sometimes used as they detect metals such

as aluminum (flip tops of soft drink cans) that usually don't show up on x-rays.

The treatment of a child with a swallowed foreign body depends on many factors: what was swallowed, its size and shape, where it's located in the digestive tract, and the child's symptoms.

If the foreign body is stuck in the esophagus, then endoscopic removal of the object is recommended. The child is given anesthesia and a special tubular instrument, an endoscope, is put into the child's mouth and down his esophagus. The doctor performing this procedure, usually a gastroenterologist (a specialist in the digestive tract) or an otolaryngologist (a specialist in the ears, nose, and throat) will use special instruments through the tube to grab and remove the foreign body. Sometimes the doctor decides it's best to push the swallowed object into the child's stomach and let it pass on its own.

Endoscopy, although very safe, has its own risks – the most common is making a hole in the esophagus. That's why the doctor evaluating the child has to weigh the benefits of the procedure against its risks and the chances the child will pass the object into the stomach and eventually out the other end.

Ninety percent of swallowed objects successfully pass through the esophagus and into the child's stomach. Once in the stomach, almost all objects, even sharp ones, go through the small and large intestines and come out mixed in the stool. However, some doctors believe that larger objects should always be removed, no matter where they are in the digestive tract.

If the plan is to let the object pass on its own, the doctor may want to order regular x-rays to monitor the object's progress. For dull objects, the x-rays may be weekly while with sharp objects the x-rays may be performed daily.

There are a number of reasons to remove an object in the intestines. A very sharp or pointed object (such as an open safety pin) may poke a hole in the intestines. This lets the intestinal contents leak into the abdomen, causing peritonitis, an infection of the abdominal cavity. Some objects can also become stuck. The best way to remove an object depends on its size and location. A long endoscope inserted either in the mouth or through the anus may be able to reach and remove the object. Other times, surgery is required.

Most swallowed objects come out on their own within four to six days, though they can take up to four to six weeks. As long as the child is doing well and is without symptoms, his doctor may just wait and watch. However, you will need to carefully check your child's stool for what was swallowed.

An emergency evaluation is needed if your child has any symptoms or has swallowed a sharp object or a battery. If it was a coin or other smooth object, you should call your child's doctor right away. For small smooth objects, such as a tiny bead, an immediate call isn't required. However, if your child develops any symptoms or if you have any concerns, then a call or trip to the emergency room is indicated.

Button batteries (also called disk batteries) pose special dangers if they remain in the esophagus or stomach. They can cause voltage burns or leak, causing acidic burns as soon as four hours after being swallowed. Immediate medical care is needed if your child swallows one of these.

Q & A, Continued from page 7

Many toddlers drink enormous quantities of milk and juice each day and so have no appetite left for any solid food. Such a diet is rich in calcium but lacks enough iron. My advice would be to cut down on the daily milk intake to no more than 16 ounces and no more than four ounces of juice. Let him drink more water. This simple step often solves the problem since he will now have some appetite left for healthy solid foods. I would also suggest that you discuss putting your youngster on a daily iron-fortified vitamin with his doctor. Preventing iron deficiency is important since an iron-deficient toddler will absorb more lead from the environment than a toddler who is not iron deficient. And, lead in the blood can cause the loss of I.Q. points.

Finally, never try to force your child to eat. Not only doesn't it work but also it just makes things worse now and in the future. Mealtime should be relaxed and not a battleground. If he doesn't want to eat, so be it. I promise he won't starve between dinner and breakfast.

Alvin Eden, MD

Treating Ear Infections

Q I've heard that ear infections no longer need to be treated. Is this true?

A A recent update from the American Academy of Pediatrics suggested that antibiotics are not always necessary for ear infections. Before looking at the treatment recommendations, let's see what else the report had to say.

An ear infection (or "otitis media") means there is infected fluid behind the ear drum. Most, but not all, ear infections are triggered by bacteria that are often found innocently waiting in the upper respiratory tract. These bacteria take advantage of conditions that arise when a child has a common cold – that is, when warm mucus is unable to drain properly from the middle ear. When your child has had a cold for a few days, and then gets worsening symptoms such as a new fever, irritability, and wakeful nights, it is very likely that the cold has developed into an ear infection.

The best way to prevent an ear infection is to avoid getting the viral cold in the first place: wash or sanitize hands frequently, avoid sick people, and if possible avoid group child care. Some immunizations can also protect against ear infections, although these only have a modest benefit.

After a careful exam confirms an ear infection, the most important aspect of treatment is pain control. Pain relief can include a warm compress, numbing ear drops, or an oral medicine such as acetaminophen (e.g. Tylenol®) or ibuprofen (e.g. Motrin® and Advil®). Because pain medicines are better at preventing pain than treating pain, once you know your child has an ear infection it is usually best to continue pain medicines around the clock for a day or so, rather than wait for the child to complain. This is especially true for younger children who can't tell a parent about worsening pain.

About two out of three ear infections will resolve on their own, without any antibiotics. The advantages of using antibiotics are that pain will improve sooner, and that you do increase your odds of a successful cure to 80-90%. For older children who can clearly communicate symptoms and have had no history of prolonged or recurrent ear infections, a mild infection without much pain can safely be watched for a few days. Antibiotics should be used for young children (typically younger than two years old), children who are especially ill or uncomfortable, or any child who fails to improve without antibiotics after a few days.

Roy Benaroch, MD

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Hands: The Prime Movers

By Meg Fisher, MD

Hands are responsible for transmitting many, if not most, infectious diseases. Imagine you have a common cold: the virus exists within your nose and upper airways. When nasal secretions increase, your nose runs and you may start to cough. So what do you do? You wipe your nose, of course. And what do most people use to wipe their noses? Adults may wipe their nose with tissues, but children use their hands. And how do you cover a cough? Your mother, grandmother and teacher taught you to cover your mouth when you cough, but unfortunately adults and children generally cover their mouths with their hands. Now the virus that was within your nose, eyes or throat is now on your hands and transfers to another hand or a surface where it is picked up by someone else's hand. Then what? That person's hand rubs his eye or picks his nose and in doing so, deposits the virus onto a mucosal surface where it can thrive and cause a new cold!

You disagree? You say that adults don't pick their noses. Think again and use your powers of observation. The next time you are at a stop light, look in the car next to you. You will soon notice that nose picking is normal adult behavior. The entire hand-to-hand or hand-to-surface-to-hand cycle is the route of transmission of most respiratory viruses. Certainly if a person coughs directly into your face, you may be directly inoculated, but more often it is the unsuspected hand at work!

You disagree again? You say that adults use tissues to wipe their noses and cover their mouths. Really? Do you have a tissue at hand now? In my experience, the only people who readily have tissues are the mothers of young infants; the rest of us use our hands or sleeves. By the way, coughing into your sleeve is the way to go! When a virus gets onto a cloth or tissue, it is not likely to be picked up by a hand. So teach your children to cough into their elbows, not onto their hands!

There is a similar route for gastrointestinal bugs. The germ is in the stool or diarrhea then gets onto the hands during diaper changes or while using the toilet. Not everyone remembers to wash after going to the bathroom. And, young children have ready access to their diapers so they often contaminate their hands. Again, the germ-ridden hand touches another hand or surface, then an unsuspecting hand touches the now-contaminated surface and acquires the germ. In this case, the hand unfortunately finds its way to the

mouth. You have all watched young children: they explore the world with their mouths! Whatever they pick up goes into the mouth. Hand-oral contact is a great way to spread germs.

So, what should you do to prevent the spread of germs? It's clear: wash your hands and have your kids do the same! How? Running water is the key. Rubbing hands under running water for 15 seconds will wash off most of the important germs. What about soap? Any is fine. If this child's hands are sticky, then you are more likely to spend the 15 seconds washing. Be sure to time yourself since 15 seconds is much longer than you think. Pick a song verse that takes 15 seconds to sing and hum or sing out loud while you wash (singing from A to Z, at a moderate pace works pretty well). I bet you will immediately see others smiling and wondering what you are doing! The type of soap is not very important, and it is unnecessary to use antibacterial soap since you are washing the germs away, not necessarily killing them. If you are in a hospital or you have a medical device, you will need to use an alcohol rub to kill the germs. Still you should wash first since the alcohol rub will not work if there is visible dirt or proteinaceous material (such as nasal snot). The alcohol rubs are useful for the rest of us when we find ourselves without running water.

In summary, hand washing is the best and safest way to keep you and your children healthy! Teach your kids – even the little ones – how to wash their hands! Wash your hands and drown a germ today and every day, several times a day! Be well and be happy!

Dr. Meg Fisher is the Medical Director of The Children's Hospital at Monmouth Medical Center in Long Branch, NJ. She is a pediatric infectious disease subspecialist. Dr. Fisher received her medical training at UCLA School of Medicine. Her residency and fellowship were completed at St. Christopher's Hospital for Children in Philadelphia. Dr. Fisher's interests include infections in children, prevention of infection and medical education.

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The Terror Within: Recognizing and Dealing with Violent Tendencies in Children

By Joanne M. Friedman, MEd

The blue eyes and blonde curls gave the little boy an angelic appearance, though they were partially obscured by the bars on the small window of his door at the diagnostic center. This cherub with the charming smile and open gaze was behind bars at the ripe old age of seven for killing a man. Too young for prison, he was remanded to the psychiatric treatment facility for study in hopes of determining what had caused him to commit such a horrible crime. His comment to a woman who asked him that pointed question: "I didn't want to hurt him; I just wanted to kill him."

That was 1966. In the intervening years we've been subjected to an increasingly alarming account of the results of other children's questionable grip on reality. We are assaulted annually by images graphic and disturbing, leaving us wondering whether we are on a downward spiral towards lawlessness and a fear-ridden national consciousness. Research into the problem of violence in children is creating a growing catalog of causes postulated for such behavior.

The American Psychological Association Practice Directorate has published a bulletin titled "Warning Signs of Teen Violence" in which they list, among a long list of other contributing factors to childhood violence, the following:

- Peer pressure
- Need for attention or respect
- Feelings of low self-worth
- Early childhood abuse or neglect
- Witnessing violence in the home, in the community, or in the media
- Easy access to weapons

The list of warning signs is long, split into those that warrant immediate action on your part and those that must persist over time in order to be considered problematic. The long-term problems are not unexpected. They are the same behaviors that might signal drug or alcohol abuse or certain categories of emotional disturbance and personality disorders:

- Historically violent behavior
- Drug or alcohol use
- Gang-related preferences or behaviors
- Obsession with guns or other weapons
- Threatening behavior

- Loss of friends
- Feelings of rejection
- A history of being targeted by bullies
- Discipline problems
- Poor grades in school
- A failure to acknowledge the feelings or rights of others

This list is by no means an absolute guideline. The last item, for instance – the inability to acknowledge others' feelings or rights – is also an identifying characteristic in children with Attention Deficit Disorder. Threatening behavior is often a learned response. We all tend to do what works for us, and weak parents may inadvertently encourage children to threaten if they usually give in when that behavior occurs. Drug or alcohol use can be directly linked to depression or anxiety. Oppositional Personality Disorder, Anti-social Disorder and Conduct Disorder, all of which appear as discipline problems and can result in poor school performance, are all related to ADHD. They can result in violent behavior, but it's not a given that they will.

But the entire list, taken as a whole, paints a clear picture of a disaster in the offing. Combine the long-term symptoms with the acute behavior changes such as an increase in any or all of the listed behaviors, or an escalation to actually carrying a weapon or verbally threatening violence, and the necessity for immediate intervention becomes imperative. There is no time to wonder whether or not Jack or Jackie is about to knife the neighbor. There is only the need to act swiftly and apologize later.

There is also the need for caution. Intervention is useless if the person attempting to stem the violence is injured or killed in the process. Thus it is important to follow rules that have been adopted by law enforcement and other high-risk groups.

- DO NOT be confrontational.
- Call the child by name and insist that he call you by name – personalization often creates an atmosphere that is not conducive to violence.
- Keep in mind that a child on drugs is incapable of taking in information accurately.
- If possible, keep a piece of furniture between you and the child and make sure you are aware at all

times of the exit routes from the room.

- If you can safely disarm the child, do so. Do not risk your life.
- Call for help as soon as you think there might be a problem. Don't approach a violent child alone if you don't have to.
- If possible, keep the child in sight until help has arrived.

Perhaps most important is the post-crisis management of the child. Once the moment has passed and the immediate danger is no longer present, do not believe that the problem has been solved and all is right with the world. Defusing a potentially deadly situation is short term. For long-term help the violent child requires counseling, behavior training, possibly medication. As a parent it is your job to make sure your child has what he or she needs. Being too harsh or too forgiving are two sides of the same coin. Neither buys mental health or safety for your child or for you.

Joanne M. Friedman received her undergraduate degree in psychology from Clark University and her MEd in special education from the University of Hartford. she has spent twenty-five years teaching special education at all levels, elementary through high school to learning disabled, emotionally disturbed, physically handicapped and developmentally disabled children and served on the Learning Disabilities Advisory Board at Sussex County College for six years. Joanne Friedman is a freelance writer living in Sussex County, NJ.

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